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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/965,844	11/07/97	ARAI	Y 0557-4223-2-

022850 LM31/0720
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EXAMINER

NGUYEN, M

ART UNIT	PAPER NUMBER
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2722

DATE MAILED: 07/20/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

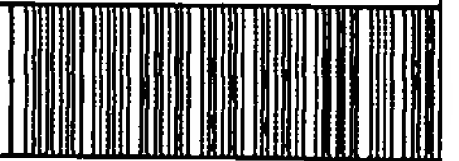
Application No.
08/965,844

Applicant(s)

Arai

Examiner
Madeleine AV Nguyen

Group Art Unit
2722



☒ Responsive to communication(s) filed on Apr 17, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-46 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 2, 6, 11, 12, 16, 21-33, 37, and 42-46 is/are rejected.

☒ Claim(s) 3-5, 7-10, 13-15, 17-20, 34-36, and 38-41 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on April 17, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/965,844 is acceptable and a CPA has been established. An action on the CPA follows.
2. Applicant amends claims 1, 3, 11, 13, 22, 24-32, 34, 42-46.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 11-12, 21-23, 25-28, 30-33, 42-43, 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukino (US Patent No. 5,268,770) in view of Perrault et al (US Patent No. 3,914,538).

Regarding claims 1, 11, 21-23, 25-28, 30-32, 42-43, 45-46, Yukino discloses a facsimile system in figures 1-2, having a character font ROM 54, a ROM cartridge 56 for storing printer emulation programs to convert facsimile image data into recording data's format which can be

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outputted from a not shown printer (column 6, lines 37-40 and column 9, lines 62-68), a RAM 38 for storing recording data, which has a clearing process for deleting stored file data to zero bytes (column 8, lines 57-61). The stored recording data are supplied to the printer via a printer interface 50.

Yukino does not explicitly disclose the claimed supplying the recording data to the printing unit in synchronization with printing pulses provided at predetermined intervals. However, Yukino illustrates an emulation of a serial dot printer in figure 9 for printing the recording data as line by line (column 11, line 44 to column 12, line 11). Upon completion of the emulation of an operation of printing one line, the top address of a line to be printed in the recording paper is moved down by one line. Thus, the recording data of one line are supplied to the printer at a time. Evidently, the printer prints the recording data of one line at an amount of printing time. After completing recording this line, the printing position is moved to a next line for ready to print the recording data of one line at an amount of printing time. Thus, the recording data are supplied to the printer after each amount of printing time, which would have been the claimed predetermined printing interval. Figure 9 also shows the printer prints the line recording data from left to right (first direction), and returns to the next line position from right to left (opposite second direction). Therefore, it would have been obvious to an ordinary skill in the art at the time the invention was made to provide the ability to supply recording data to a printer at predetermined printing intervals because the supplying one line of recording data to the printer

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after each line of printing time in Yukino would have been performed in predetermined printing intervals.

In addition, Perrault et al discloses a facsimile communication system wherein in a principal mode of operation, the transmission of video data is preceded by receiver alerting, equalizing, synchronizing and scan pitch signals for respectively shifting the receiver from a standby to an operating status and for causing line by line synchronization between sending and receiving units and for establishing the scanning pitch at the printing unit (Abstract). Perrault further teaches that control means 52 at the receiver supplies the recording data to the printer in synchronization with printing pulses provided at predetermined printing intervals (col. 7, lines 12-66; col. 8, line 18 - col. 9, line 12; col. 11, line 61 - col. 12, line 68; col. 17, line 30 - col. 19, line 17). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the teaching of the supplying the recording data in synchronization with printing pulses provided at predetermined printing intervals as taught in Perrault to the facsimile apparatus in Yukino since both of Yukino and Perrault teach the transmission, receiving and printing line by line in accordance with the transmission, reception and printing rates. That combination would provide an improved facsimile communication apparatus which accurately receive and print the received image.

Regarding claims 2, 12, 33, the interface 50 is a well-known RS-232C interface for connecting between electronic devices to transfer data information.

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5. Claims 6, 16, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukino and Perreault in view of Ohmura et al (US Patent No. 5,815,280).

Regarding claims 6, 16, 37, Yukino and Perreault discloses the claimed subject matter, as discussed above, except including a selector for selecting either the connection between the interface and the printer unit or the connection between the connector and the printer unit. The printer of the facsimile system in Yukino receives either recording image data from a scanning portion 10 or recording image data from a remote device via a restoring portion 20. These recording image data are transferred through a main bus to the interface 50, then to the printer. Ohmura et al teach a connection of an image recording apparatus in figures 2, 9 to an external device 34, and a printer 33 which selectively receives recording image data supplied from the external unit 34 or an image reader 31 (column 8, lines 23-28). Thus, it would have been obvious to an ordinary skill in the art at the time the invention was made to include a connector for connecting an external device to the facsimile machine and for the printer to print either supplied recording data from the external device or the facsimile machine. To save the cost and space at a station, the facsimile system in Yukino would have selectively shared the printer with the taught external device in Ohmura et al by including a connector with it.

6. Claims 24, 29, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukino 5,268,770 and Perrault 3,914,538 in view of Nakagawa (US Patent No. 5,819,009).

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Regarding claims 24, 29, 44, Yukino in view of Perreault et al discloses the claimed subject matter, as discussed above, except including the skipping over areas having no image of the printer's carriage. Yukino discloses the not shown printer for printing the recording data in line by line.

Yukino does not include a detailed structure of the printer. Nakagawa teaches a recording system in figures 1-7, having a printer driver 102 for checking whether there is a blank text or blank lines or a blank block (no image) in the recording image data. If there is a blank text or blank lines or a blank block, i.e., image blocks 1-3 in figure 6, the printer driver 102 determines a recording range, and designates a number of elements of the recording apparatus 64 with a record start position of the carriage for recording only the image in that block. It is clear that, Nakagawa records the image in the block and skips the detecting blank text, or blank lines, or blank block. Therefore, it would have been obvious to an ordinary skill in the art at the time the invention was made to include the detail structure of the recording system in Nakagawa to the printer in Yukino. To reduce the printing time, the printer in Yukino would have been made to detect a blank area as taught in Nakagawa in the recording data for recording the image data and skipping the detected blank area.

7. Claims 3-5, 7-10, 13-15, 17-20, 34-36, 38-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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It is found that neither prior art cited in its entirety nor based on the prior art, any motivation to combine any of said prior art for the claimed input receiving a predetermined character data at the predetermined printing intervals, gate gating the recording data so that the recording data from said interface is supplied to said printing portion when the predetermined character data is supplied thereto from said input, and signal output outputting a control signal when said input inputs the predetermined character data, the control signal being supplied to said interface, and said interface supplying the recording data to said printer unit every time said interface receives the control signal.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Perreault et al (US Patent No. 3,889,057) discloses a facsimile communication system having a local clock with respect to a received synchronizing signal at the receiver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine Anh-Vinh Nguyen whose telephone number is (703) 305-4860.

9. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

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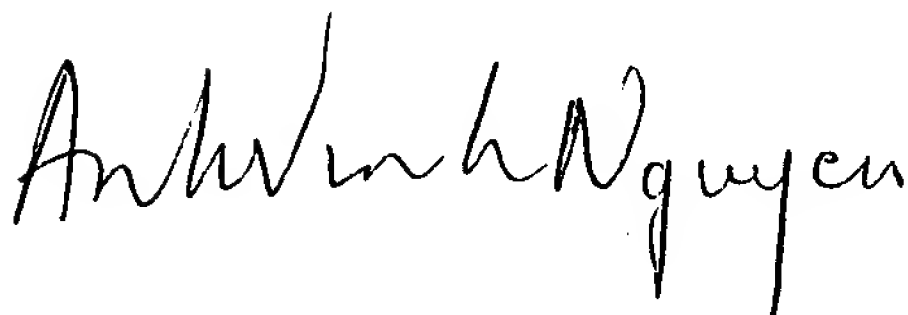
or faxed to:

(703) 308-9051 (for formal communication at s intended for entry)

(703) 308-9051 (for informal or draft communications, such as proposed amendments to be discussed an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)



Madeleine Anh-Vinh Nguyen
Primary Examiner
Art Unit 2722
July 12, 2000